2a. Provide information on your computing innovation and computational artifact. Name the computing innovation that is represented by your computational artifact. Describe the computing innovation intended purpose and function. Describe how your computational artifact illustrates, represents or explains the computing innovation intended purpose, its function or its effect. (Approximately 100 words)

My innovation is Snapchat, which is a social media platform used daily by millions. Snapchat is used to call, text, and share photos with people privately. The intended purpose of Snapchat is to communicate through social media unlike any other platform. Snapchat is an innovation successor of FaceBook and Instagram, and has passed their daily user rate because of the new ideas and uses in the app. Snapchat changed, and inspired social media platforms, as new and old platforms use its ideas and features.

2b. Describe your development process, explicitly identifying the computing tools and techniques you used to create your artifact. Your description must be detailed enough so that a person unfamiliar with those tools and techniques will understand your process. (Approximately 100 words)

My artifact was made on Google Drawings. It consists of pictures that go through the process of using Snapchat and how the innovations made by Snapchat. I found the pictures online using a relevant search from Google, making sure the images are close in size using select search, and some pictures from articles. The pictures are illustrations of ways to use Snapchat and examples of people using Snapchat. I placed the pictures in sequence to show organization and neatness, this was done by cropping images, making sure they are the same dimensions by using the crop tool provided by Google Drawings.

2c. Explain at least one beneficial effect and at least one harmful effect the computing innovation has had, or has the potential to have, on society, economy, or culture. (Approximately 250 words)

A social media app as popular as Snapchat comes with many benefits, but have some harmful effects. A beneficial effect of Snapchat is the ability to conversate with millions of people around the world. The app can use wifi, so you do not need cellular data to communicate. This is useful if you're in a foreign country where you do not have data. There are four ways to talk with people around the world with Snapchat, you could text, call, video chat, or put something on your story. Stories are a Snapchat that anyone can see. These Snapchats can be published as private stories or public stories, public stories can have categories based on events or location.

These stories can share someone's experience or feelings across the world and are seen by millions. These stories are found on the explore page. One harmful effect of Snapchat that comes with most social media is privacy leaks. Snapchat makes you enter information about yourself that includes your name, phone number, email, birthday, and credit card/paypal. This information could be leaked along with your private conversations and pictures if someone were to hack or guess your account password. Your account would be gone if you're an average user of Snapchat because the mass amounts of users makes it hard for Snapchat to contact you.

2d. Using specific details, describe: The data your innovation uses. How the innovation consumes (as input), produces (as output), and/or transforms data. At least one data storage concern, data privacy concern, or data security concern directly related to the computing innovation. (Approximately 250 words)

Snapchat uses Python, Objective-C (iOS), Cocoa Touch, and PHP to code its development language. To create its cloud hosting, Snapchat uses Route 53 and CloudFront. It uses NoSQL for database management and to structure data. Snapchat uses an API, Application Program Interface, that the Information Technology department can add to. This API is how users signals get added to Snapchat's database. One security concern is that Snapchat is connected to third party companies for accessories such as ads or Bitmoji. This is a concern because Snapchat's API allows third party companies to see users information without consent. Snapchat now encodes users account's with a hardcoded key,

2e. For each online source, include the permanent URL. Identify the author, title, source, the date you retrieved the source, and, if possible, the date the reference was written or posted. For each print source, include the author, title of excerpt/article and magazine or book, page number(s), publisher, and date of publication.

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